PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P 24341 PC 00	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/NO2004/000153	International filing date *(day/month/year)* 27.05.2004	Priority date *(day/month/year)* 04.06.2003
International Patent Classification (IPC) or national classification and IPC B63B27/16, B63B27/30, B66C13/02		
Applicant Grenland Framnaes AS et al		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
   a. ☒ *(sent to the applicant and to the International Bureau)* a total of 2 sheets, as follows:
      ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
      ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
   b. ☐ *(sent to the International Bureau only)* a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items:
   - ☒ Box No. I Basis of the report
   - ☐ Box No. II Priority
   - ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - ☐ Box No. IV Lack of unity of invention
   - ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   - ☐ Box No. VI Certain documents cited
   - ☐ Box No. VII Certain defects in the international application
   - ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 20.01.2005	Date of completion of this report 22.09.2005
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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/NO2004/000153

Box No. I Basis of the report

1. With regard to the **language**, this report is based on:

   ☒ the international application in the language in which it was filed

   ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of:

   ☐ international search (Rules 12.3(a) and 23.1(b))

   ☐ publication of the international application (Rule 12.4(a))

   ☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

   ☐ the international application as originally filed/furnished

   ☒ the description:

   pages 1-6

   pages* _____ as originally filed/furnished

   pages* _____ received by this Authority on _____

   pages* _____ received by this Authority on _____

   ☒ the claims:

   pages _____

   pages* _____ as originally filed/furnished

   pages* 1-2 as amended (together with any statement) under Article 19

   pages* _____ received by this Authority on 11.07.2005

   pages* _____ received by this Authority on _____

   ☒ the drawings:

   pages 1-6

   pages* _____ as originally filed/furnished

   pages* _____ received by this Authority on _____

   pages* _____ received by this Authority on _____

   ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

   ☐ the description, pages _____

   ☐ the claims, Nos. _____

   ☐ the drawings, sheets/figs _____

   ☐ the sequence listing *(specify)*: _____

   ☐ any table(s) related to the sequence listing *(specify)*: _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

   ☐ the description, pages _____

   ☐ the claims, Nos. _____

   ☐ the drawings, sheets/figs _____

   ☐ the sequence listing *(specify)*: _____

   ☐ any table(s) related to the sequence listing *(specify)*: _____

* *If item 4 applies, some or all of those sheets may be marked "superseded."*

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/NO2004/000153

Box No. V **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-7	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-7	NO
Industrial applicability (IA)	Claims	1-7	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

The most relevant of the documents cited in the International Search Report:

D1: US 4395178

The claimed invention relates to a personnel capsule device for transferring personnel between a first vessel and a second vessel or an offshore installation. A guideline is connected between an attachment point on the personnel capsule device and the vessel. The capsule device (1) has a downwardly open internal conical enclosure (8). The open enclosure (8) has its largest cross section facing downwards. A conical positioning and landing device (4) protrudes upwardly from the first vessel (2) and into the open enclosure (8) when the capsule device (1) is in its docked position. The purpose of the invention is to solve the problem with insecure and/or expensive personnel transfer between vessels at sea.

D1, the closest prior art, discloses a transfer system to move personnel or cargo between a movable vessel (22), such as a boat, and a stationary platform (10). The personnel or cargo is transported in a carrier that is connected to the platform via an extendable and retractable intermediate uphaul line (16) and to the vessel via a downhaul line (36). When the carrier is being lifted from the vessel, the downhaul line is payed out at a controlled rate and the uphaul line is retracted to keep the carrier out of contact with the vessel which may be rising or falling due to wave action of the water. At a predetermined elevation, the tension in the downhaul line is decreased so that the uphaul line retracts to

.../...

In case the space in any of the preceding boxes is not sufficient.
Continuation of: Box V

move the carrier out of the area of possible contact with the vessel. The reverse operation is followed to move the carrier from the platform to the vessel. Preferably, the downhaul means comprises a downhaul cable, and the downhaul means has three operating modes, namely: a velocity controlled retracting mode where said downhaul cable is retracted at a controlled velocity, a velocity controlled extending mode where said downhaul cable is extended at a controlled velocity and a low tension mode where the downhaul cable is extended or retracted selectively to alleviate slack in the cable where there is oscillating movement between the carrier and the platform. Furthermore, the bottom surface (42) of the carrier slopes downwardly and inwardly in a configuration of a truncated cone. The vessel is provided with a landing pad (26) to engage the bottom surface of the carrier. The landing pad (26) should provide some cushioning for the carrier (24), and as shown herein it comprises a plurality of pneumatic cushions (62) arranged in a generally circular configuration to engage the lower peripheral surface portion (42) of the carrier housing (38).

The personnel capsule device according to claims 1-6 differs from the transfer system to move personnel or cargo between a movable vessel and a stationary platform described in D1 since it is mentioned in claim 1 that positioning conical enclosure (8) has its largest cross section facing downwards and not upwards as in D1. However, it must be considered obvious to turn the positioning cone, possibly a truncated cone, either with the cone base down as in claim 1 or with the cone base upward as in D1. Therefore, the subject matter of claims 1-6 is not considered to involve an inventive step.

Claims

1. A personnel capsule device (1) for transferring personnel from a first vessel (2) and to an offshore installation (40) or to another ship by means of a lifting device (44), where the first vessel (2) is equipped with a to the capsule device (1) complementary fitting positioning and landing device (4), where shock absorbing material (32) is provided between the positioning and landing device (4) and the capsule device (1), characterized in that the capsule device (1) has an downwardly open internal conical enclosure (8), the open enclosure (8) having its largest cross section facing downwards, and where the positioning and landing device (4) protrudes upwardly from the first vessel (2) and into the open enclosure (8) when the capsule device (1) is in its docked position.

2. A device according to Claim 1, characterized in that the positioning and landing device (4) is formed as a possibly truncated cone.

3. A device according to Claim 1, characterized in that a guideline (36) connected to the first vessel (2) is directly or indirectly connected to the attachment point (42) of the lifting device (44) during at least part of the transfer.

4. A device according to Claim 1, characterized in that a specific tension is imparted to the guideline (36), at least during part of the transfer.

5. A device according to Claim 4, c h a r a c t e r i z e d i n that the guideline (36) is connected to a constant tension winch (34) associated with the first vessel (2).

6. A device according to Claim 1, c h a r a c t e r i z e d i n that the capsule device (1) is provided with a space (14) designed so as to function as a lounge for the personnel to be transferred.

7. A device according to Claim 6, c h a r a c t e r i z e d i n that the space (14) is equipped with at least one passenger seat (22).